<u>CHAPTER 3</u> <u>SAFE VEHICLE OPERATION</u> AND TRAFFIC LAWS

In this chapter, you'll find essential information about safe and legal vehicle operation and techniques for avoiding accidents.

The most important rule for safe vehicle operation is to **pay attention to the road!** Even the most experienced drivers are often distracted while driving. Always anticipate potential problems. A good defensive driver looks out for the actions of other drivers.

Driving Lanes and Lane Markings

Driving lanes and lane markings help separate traffic going in opposite directions and on busier roads allow for multiple lanes of traffic going in the same direction. The first thing to remember is to stay in the driving lane in which you are traveling, except to turn or pass.

Yellow Lane Markings

Yellow lane markings are found on or near the center of a road and are used to divide two-way traffic. If there is a double yellow line or a solid yellow line on your side of the road, never drive to the left of the solid yellow line, except to turn.





White Lane Markings and Changing Lanes

White lane markings are used to separate multiple lanes of traffic going in the same direction. You should not cross a solid white line. Most multiple lane roads have broken white lines to separate lanes. A broken white line indicates that a driver may change lanes when it is safe to do so. Follow these rules when changing lanes:

- first, make sure traffic directly ahead is clear;
- check your mirrors for vehicles behind you that have begun or are about to pass you;
- briefly turn your head in the direction you wish to proceed, to ensure that no vehicle is in your vehicle's "blind spot" to see if there is sufficient room to move into the adjacent lane;
- use your directional signals to alert other drivers that you are about to change lanes;
- smoothly move into new driving lane; and
- only change one lane at a time.



If you are changing lanes to prepare for a turn, do so at least 200 feet before the turn. Do not weave in and out of lanes! Your risk of an accident greatly increases. On the highway, slower vehicles should use the lane to the right. Leave the left-hand lane for faster moving vehicles that wish to pass.

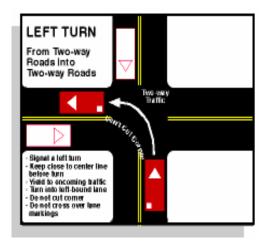
Rules for Making Safe and Legal Turns

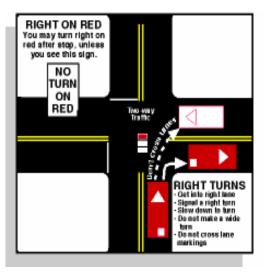
Many accidents can be avoided by adhering to the following rules and guidelines in making proper turns. Always keep in mind that it is important to plan ahead to anticipate when you are going to make a turn. If you are going to be traveling on roads with which you are unfamiliar, it is always helpful to consult a map in advance to identify when you will have to make turns to avoid last-minute decisions.

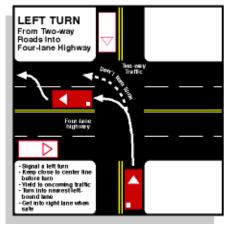
Turning From and Into the Proper Lane

If the road from which you will be turning has more than one lane, the first rule for a safe and legal turn is to move into the lane nearest the direction you will be turning well in advance of the turn. Follow the <u>rules for changing lanes</u> to safely move into the proper lane prior to making a turn. The following diagrams illustrate a proper turn.

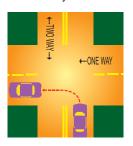
Tip: An easy way to remember proper lane positioning for a turn is, left turn left lane right turn right lane.







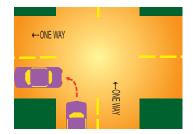
Turning left from a two-way street onto one-way street.



Turning left from a one-way street into two-way street

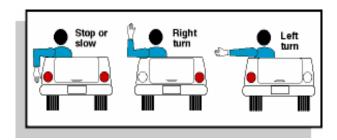


Turning left from a one-way street into a one-way street



Signaling Your Intention to Turn

Give a proper turn signal at least 200 feet before turning or changing lanes. If the speed limit is 50 miles per hour or more, give a proper turn signal at least 300 feet before turning or changing lanes. The safest type of signal is using the lighted signals that are standard equipment on most vehicles. If, however, one or more of these signals is malfunctioning, you may use the hand signals (except on driving tests) illustrated below:



Turning at Intersections

When making a turn at an intersection, you must follow the rules of traffic control devices, and always watch for pedestrians! Never force a pedestrian to make a special effort to avoid your car when turning. If you must stop at the intersection prior to turning, keep the vehicle's front wheels pointed straight and apply the brakes before proceeding.

Legal Right turns when a Traffic Signal is Red

In order to facilitate greater traffic flow, Indiana and most other states allow a driver to turn right at an intersection - in limited circumstances - when a traffic signal is red. A legal turn may only be made if all of the following criteria are met:

- the driver comes to a complete and full stop at the traffic light;
- the driver makes sure there are no vehicles or pedestrians in the path of the turn;
- the driver does not interfere with the right-of-way of any vehicle or pedestrian who is moving in the direction of the turn; and
- the driver follows the other rules pertaining to turns, i.e., correct lanes, discussed in this section.

Special Exception for Left Turns

When the traffic signal is red and if the driver is on a one-way street and wishes to turn left onto another one-way street, a legal turn may be made, if the driver follows the rules listed above for turning on red. This is the only circumstance in which a driver may make a legal left turn against a red traffic signal.

U-turns

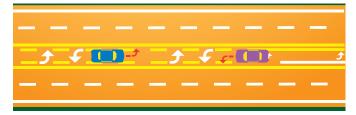
A U-turn is a potentially dangerous maneuver that should only be undertaken when absolutely necessary. Obey the following rules:

- always yield the right-of-way to oncoming vehicles and to any pedestrians
- never make a U-turn on any curve in the road or when approaching or nearing the crest of a hill or grade
- never make a U-turn on an interstate highway; simply proceed to the next exit and reenter the highway in the opposite direction
- never make a U-turn when a sign is posted prohibiting it

Turning Left From Specially Designated Center Lane

Busy roads on which there are many places a vehicle may make a left turn have a center lane designated solely for left-turning vehicles. Use these center lanes to decelerate and turn left if available. Always be aware that vehicles traveling in the opposite direction may be entering the center to turn left in front of your vehicle. Never use this type of center lane for passing or overtaking other vehicles. Designated center lanes for left turns can be identified by a sign with alternate directional arrows stating "CENTER LANE ONLY" or pavement arrows.

NOTE: Pavement arrows in center lanes are not always installed



Following Turning Vehicles

When following a driver who has signaled his or her intention to make a turn or who has slowed down and may be looking to make a turn, drive defensively. Always slow down, and be prepared to stop.

Rules for Passing/Utilizing Left Hand Side of the Road

This section discusses safe and legal passing when a driver must use lanes on the left-hand side of the road designated for traffic traveling in the opposite direction.

Using the left-hand side of the road to pass vehicles is a potentially dangerous driving maneuver in which a serious accident can occur. Always consider the necessity of such a pass. Passing Prohibited:

It is illegal and extremely dangerous to attempt to pass in the following situations:

- A yellow solid line is marked on the driver's side of the center line of the road
- A yellow pennant-shaped "No Passing Zone" sign is posted on the left-hand side of the road or a white rectangular "Do Not Pass" sign is posted on the right-hand side of the road
- When on or approaching a curve

- When approaching the crest of a hill or grade
- Within 100 feet of an intersection or railroad crossing
- Within 100 feet of a bridge, viaduct or tunnel

Requirements for Making a Safe and Legal Pass:

- Make absolutely sure the passing lane is clear of traffic. You are required to return to the right-side of the road no less than 100 feet before any approaching vehicle
- Check behind and to the left to make sure another car is not attempting to pass your vehicle
- Give appropriate turn signal
- Move into the passing lane, then accelerate, and continue to move forward until the vehicle passed can be seen in the rearview mirror
- Before returning to the original driving lane, give the appropriate turn signal

When Being Passed:

If your vehicle is being passed on the left-hand side of the road, allow the vehicle to pass safely and do not increase your speed.

Pedestrian Safety

Crosswalks or the existence of a pedestrian signal indicates that pedestrians are nearby. Please follow these rules and guidelines when pedestrians are in the vicinity of your vehicle:

- Always yield the right-of-way to pedestrians;
- Do not make a turn that causes a pedestrian to stop, slow down or make some other special
 effort to avoid a collision
- If children are in the vicinity, take special care because children are not fully aware of the dangers of traffic
- Be respectful of others who have difficulty in crossing streets, such as elderly persons or persons with a visual disability

Blind pedestrians

The primary traveling aids for a person who is blind are often a white cane or a trained guide dog. Independent travel for people with visual disabilities involves some risk that can be greatly reduced when you, the driver, are aware of the use and meaning of a white cane or guide dog. Drivers must always yield the right of way to persons who are blind.

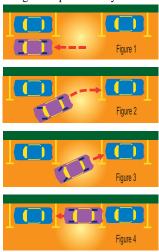


When a pedestrian is crossing a street or highway guided by a dog or carrying a white cane (or a white cane with a red tip), **vehicles must come to a complete stop.**

Parking Rules

Parallel Parking:

Parallel parking is simple and easy when drivers follow this procedure:

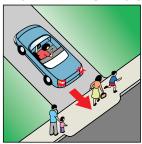


- 1. Signal your intention to park;
- 2. Position the vehicle parallel with the vehicle parked in front of the empty space and maintain at least two feet from this vehicle. (Figure 1)
- **3.** Align the rear bumpers of both vehicles. *(Figure 1)*
- **4.** Back up slowly until the front of the vehicle is even with the front door of the car beside you. Turn the wheel sharply to the right and back up slowly until the vehicle is at a 45-degree angle, and back up.

When the front of your vehicle passes the rear of the car beside you, turn your wheel to the left

sharply, then gradually while backing in. (Figure 2 & 3)

- 5. Straighten the wheels and pull forward. (Figure 4)
- **6.** When parked facing downhill, turn the wheels toward the curb. When parked facing uphill, turn the wheels away from the curb. When there is no curb, turn the wheels away from the street.
- 7. Use your turn signal when entering traffic from a parking space.



Backing

Backing is more difficult for the beginner than driving forward because the field of vision is blocked by the vehicle itself, and it's harder to control speed and direction. You will need a lot of practice to keep absolute control of the vehicle. Backing out of a parking place requires you to look in both directions and double-check for cars and pedestrians.

To back up, turn to your right so you can see through the back window. Never use only the rearview mirror for backing up. Always go slowly, watching carefully in all directions. Never back into an intersection in order to turn around. It's much safer to drive around the block.

Safety Tip: Always check behind your vehicle for bikes and small children BEFORE you enter your vehicle. This is especially important for yans and pickups.

Illegal Parking Areas

Parking in the following areas is prohibited:

- highways (unless indicated otherwise)
- intersections or pedestrian crosswalks
- on sidewalks
- in front of any driveway
- within 15 feet of a fire hydrant or in fire lanes
- underpasses or bridges
- adjacent to yellow curbs
- beside another parked vehicle

Maximum Speed Limits and Driving at Safe Speeds

Indiana law requires that drivers operate a vehicle at the posted speed limit. As discussed below, there are a number of road conditions that could cause a driver to be more cautious and drive at slower speeds.

Maximum Speed Limits are:

Passenger Vehicles

Rural Interstate Highway: Defined as outside an urbanized area with a population of at least 50,000.

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• Trucks 26,000+ Pounds	60 mph or as posted
School Buses	55 mph or as posted
Effective July 1, 2005 (when posted)	
Passenger Vehicles	70 mph or as posted
• Trucks 26,000 + Pounds	65 mph or as posted
Rural State Divided Highway	60 mph or as posted
Urban Interstate Highway	55 mph or as posted
United States Federal Route (e.g. US 31)	55 mph or as posted
Rural State Highways (e.g. State Road 37)	55 mph or as posted
Most residential areas	30 mph or as posted
County Roads	50 mph or as posted

Drivers must always be on the lookout for **LOWER** posted speed limits on highways. County and local roads may have different posted speed limits.

Interstate Highways

HISTORY OF INTERSTATE HIGHWAYS

The government began studying the concept of a nationwide network of high-speed expressways in the late 1930's. Planners originally envisioned three East-West and three North-South highways. Congress finally authorized a 40,000-mile network in 1944.

HOW THEY'RE NAMED:

North-South interstates bear odd-number names. The numbering begins on the West Coast and along the southern border. East-West interstates bear even -numbered names. Beltways around a city (such as I-465) carry a three-digit number. If the first digit of a three-digit number is odd (1, 3, or 5), that means that you are traveling on a spur route. A spur route is a section of the interstate that connects two different interstates or into a major city.

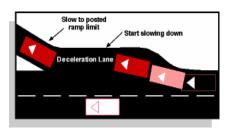
FUN FACTS:

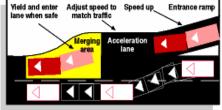
- New York has 28 interstates the most of any US state
- Texas has the most interstate mileage-- 3,202 miles.
- I-95 traverses the most states, 16.
- There are approximately 1,200 rest areas along interstate highways.

Safe Driving on Interstate Highways

Though designed for safety, interstate highways pose specific risks for drivers that do not follow the rules of the road and safe driving techniques.

- Speed: Excessive speed greatly increases the likelihood of an accident. A driver has
 much less time to react to unexpected actions of other drivers or other potential roadway
 hazards.
- Alertness: Because a driver has less time to react, driver alertness is very important to
 anticipate problems well before a driver comes upon hazardous situations. Also, watch
 for signs of fatigue that tell the driver that he or she should let someone else drive or that
 he or she should get off the highway at an exit to rest.
- Planning Ahead: Consult maps or get directions to the destination to which you are
 going prior to departure. A driver who is trying to read every exit sign to attempt to
 determine where to get off of the highway cannot devote sufficient attention to traffic
 conditions.
- Merging: Good judgment and good timing are necessary to merge smoothly with fast-moving traffic. Upon entering an interstate on-ramp, stay to the right and increase your speed in the acceleration lane to allow your car to merge with the traffic when the path is clear. Drivers already on the interstate should, for their own safety, make allowance for those entering. However, it is your responsibility to yield the right-of-way to other cars on the interstate.





- Special Interstate Traffic Prohibitions:
 - Backing Up: It is illegal to back up on an interstate highway to reach a missed exit. If you miss an exit, simply drive to the next exit.
 - <u>U-turns:</u> It is illegal for any vehicle, other than an emergency vehicle or a highway
 maintenance vehicle, to make a U-turn by crossing the median of an interstate
 highway.
 - Stopping on Shoulder: Except in the event of an emergency or a disabled vehicle, do not stop or park a vehicle on the shoulder of an interstate highway.
 - <u>Large Trucks:</u> Trucks are restricted to the right lane on sections of interstate with two lanes in one direction and the right two lanes on sections of interstate with three lanes or more in one direction.

Maximum Speed Limits in Special Situations

- School Zones: If you are driving in the vicinity of a school, you must slow down to the lower posted speed limit for the school zone. Common hours are between 7:00 a.m. and 4:30 p.m. Monday through Friday. Local authorities may establish lower speed limits for school zones when children are present.
- <u>Highway Work Zones:</u> The maximum speed limit in a highway work zone is forty-five (45) miles per hour or a lower posted speed.
- <u>School Buses:</u> When not operating on an interstate, federal or a state highway the maximum speed limit for a school bus is forty (40) miles per hour unless the posted speed limit is lower.

Conditions that Should Cause Drivers to Consider Slower Speeds

Excessive speed, even when conditions are ideal, is dangerous and increases the likelihood of an accident. Driving at or in excess of the posted speed limit under the following roadway conditions is even more dangerous:

- bad weather and poor visibility
- · slick or icy roads
- · worn tires
- unsafe vehicle condition
- impaired physical condition
- overdriving headlights
- hazardous conditions on road surface

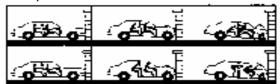
Speed and the Ability to Stop a Vehicle:

The following chart provides an indication of just how fast a vehicle travels in one second at 35, 55 and 65 miles per hour:

Speed	35mph	55mph	65mph	
Feet traveled in 1 second	51.3	80.7	95.3	
Lanes of traffic crossed in 1 second	2.6	4.0	4.7	
Seconds to travel a football field	5.8	3.7	3.1	

Following Distance -- The Two Second Rule:

A good rule for drivers to follow is to stay at least two seconds behind the vehicle ahead. When following a vehicle, watch for the vehicle ahead to pass a fixed object and estimate how much time elapses before your vehicle passes the object. Remember: A vehicle in front of you may stop for any number of reasons at any time; a defensive driver is prepared to respond to the unanticipated actions of other drivers.



safety belts save lives!

SAFTEY BELTS AND CHILD SAFETY RESTRAINTS

Safety belts and child safety restraints (i.e., car seats) save thousands of lives each year, and improve your chances of surviving a crash by 60 percent. Indiana law requires that drivers and all front-seat passengers use seat belts at all times when a vehicle is operated.

IMPORTANT: Even if the vehicle you are operating has one or more air bags, use your safety belt. The air bag is designed to work in tandem with the safety belt to slow the car's occupant down in the event of a collision. Failure to use a safety belt could result in injury to the occupant from the air bag.

Safety Belts:

When Required: All front seat occupants of passenger motor vehicles manufactured in 1964
or thereafter are required by law to use safety belts. Operators of buses are also required to
use a safety belt. A safety belt or a child restraint system must secure children between four
years of age and 12 years of age.

Exceptions:

- Persons who, for medical reasons (and must carry the medical statement from a doctor), should not wear a safety belt;
- Certain commercial, postal and newspaper carriers who have to make frequent stops to deliver goods and services;
- BMV Driver Examiners while conducting a drive test.

Child Passenger Restraint Systems: A person operating a motor vehicle in which there is a child passenger under age four is required by law to properly secure the child in a child restraint system (i.e. child car seat) unless it is reasonably determined that the child cannot fit in a child restraint system. Then the child is required by law to be properly restrained by a safety belt.

EFFECTIVE July 1, 2005: A person operating a motor vehicle in which there is a child passenger under age eight is required by law to properly secure the child in a child restraint system (i.e. child car seat or booster seat) unless it is reasonably determined that the child cannot fit in a child restraint system. Then the child is required by law to be properly restrained by a safety belt. The law requires children between age 8 and 15 to be restrained with a seatbelt.

Passenger Air Bags: The explosive power of an air bag has killed children and elderly adults under 5 feet tall. If your car is equipped with an air bag on the passenger side, the National Safety Council recommends putting children under the age of 12 in the back seat.

SAFE VEHICLE OPERATION IN SPECIFIC SITUATIONS

This section suggests guidelines for driving in special driving situations:

Night Driving

Operating a vehicle at night presents a number of potential problems. These problems can be made worse if the driver is not used to operating a vehicle at night or when other adverse conditions exist.

- <u>Visibility:</u> Pedestrians, road markings and other vehicles are more difficult to identify and
 recognize at night than in the daytime. Under nighttime driving conditions, the driver should
 reduce normal speed, especially on unfamiliar roads. The glare of oncoming headlights may
 also reduce effective vision. To avoid the effects of glare, drivers should not look directly into
 the lights of an approaching vehicle but should focus on the right side of the road.
- <u>Fatigue</u>: Drivers are more likely to be fatigued while driving at night and have a higher risk for accidents. Plan ahead to avoid driving late at night, if possible, or at any time when you have not had enough sleep. Be prepared to conclude your driving session if you feel yourself unable to stay alert. Better to arrive late than to risk your life driving while you are fatigued. Signs of excessive fatigue while driving include:
 - trouble focusing your vision
 - having no memory of the last few minutes of your drive
 - beginning to drift out of your lane
 - failing to maintain a constant speed
 - head nodding and actually feeling as though you are about to fall asleep

The best thing to do if you are beginning to feel drowsy is to let another person drive or find a safe area to pull over and rest. A driver's efforts to stay awake when excessively fatigued, such as rolling down the windows, turning up the radio, etc., are usually ineffective and may give you a false sense of alertness. This puts you and all other drivers around you at a greater risk for an accident.

- <u>Use of Headlights:</u> Drivers must use headlights between sunset and sunrise as well as at any other time in which visibility is less than five hundred (500) feet. Lower headlight beams must be used when approaching within 500 feet of an oncoming vehicle or when following within 200 feet of the rear of another vehicle.
- <u>Pedestrian Safety:</u> Pedestrians walking along a roadway that does not have a sidewalk, should walk facing the oncoming traffic. When walking along a highway at night or under darkened conditions, pedestrians should wear light colored clothing or carry something that will reflect light.

Driving in Certain Weather Conditions

- Winter Driving: Driving in winter weather presents a number of dangers due to ice, snow and extremely cold temperatures. ALWAYS CLEAR THE WINDOWS OF YOUR VEHICLE BEFORE BEGINNING TO DRIVE.
- <u>Driving in Icy Conditions:</u> Ice on the roadway is a potentially dangerous condition that can cause a vehicle to lose traction.
- Skids: Sudden turns, lane changes or hard braking can throw a vehicle into a skid. The procedure for correcting a skid is the same for both front-wheel-drive vehicles and rear-wheel-drive vehicles. If your vehicle begins to lose traction and the rear wheels begin sliding sideways, ease off the gas pedal. Do not make a fast turn away from the direction of the skid and do not over steer. That will cause a spin. If your vehicle has conventional brakes, turn the steering wheel in a controlled manner in the direction the rear of the car is sliding. When traction is regained, straighten the vehicle and proceed slowly. In any emergency situation if your vehicle is equipped with an anti-lock brake system (ABS), keep your foot on the brake pedal, maintaining firm and continuous pressure while steering normally. DO NOT PUMP THE BRAKES! A mechanical sound or noise and vibration or increased resistance in the brake pedal indicates that ABS is working. Just hold the brake pedal down and let the anti-lock system work for you.
- Remember to always give yourself more time to stop on icy roads.
- <u>Driving in Snow:</u> Snow, especially when mixed with significant wind, poses a number of
 problems for drivers. Visibility may be substantially reduced. Watch for drifting snow,
 particularly in rural areas where only a few inches of snow can cause roads to become
 impassable. Always watch for icy conditions when there is snowfall on the ground,
 particularly at intersections. Use your headlights so other drivers can see you.
- <u>Driving in Extremely Cold Conditions:</u> Always allow a vehicle engine plenty of time to warm up in very cold conditions.

Winter Driving Tips:

- Drive with a full tank of gas so that if you become stranded you can keep the heater in your vehicle running for as long as possible
- Be aware that moisture on ramps, bridges and overpasses may occasionally freeze before other sections of the driving roadway
- Turn on your lights to see and be seen
- Brush the snow off your head lights and tail lights frequently
- Stay a safe distance behind snowplows
- Carry sand or strips of carpet for traction
- Carry a winter survival kit in your vehicle (i.e. booster cables, blankets, shovel, flashlight, extra clothing, candles, matches, nonperishable snack food and bottled water

• Driving in Rain: Always use your headlights so other drivers can see you. Wet roadway surfaces can be dangerously slick, especially immediately following a rainfall due to oil and dirt build up on the road. If you drive through water puddles, test your brakes by pumping them. This will also help to dry them. If the water is deeper than your tire tread, slow down. When driving on wet roads, due to a phenomenon known as hydroplaning, your vehicle is actually traveling on a thin layer of oil, dirt and water. It increases with speed, and at a point the tires may be totally on the water. If this happens there is no friction to brake, speed up, or corner. A gust of wind, a change of road level, or a slight turn can create a skid. Do not drive on bald or badly worn tires. Slow down when there is heavy rain, standing water or slush on the road. Always allow yourself additional time to stop.



Safety Tip: To avoid hydroplaning, drive with properly inflated tires

• <u>Driving in Fog:</u> Fog can greatly reduce visibility of other vehicles, pedestrians, and traffic signals. Drive cautiously and at reduced speeds. **Do not** use your high headlight beams; low headlight beams illuminate the road and objects ahead of you better. If fog closes in completely, and visibility is reduced to near zero, carefully pull off the road as far as possible, and stop. Leave your headlights on and make sure you turn on your flashing emergency signals.









Railroad Crossings

Countless people lose their lives or suffer tragic injuries due to train/vehicle collisions. Invariably, the cause for such collisions is the disregard of railroad crossing warnings by drivers.

- Who Must Stop: All vehicles carrying passengers for hire, all buses carrying passengers, and
 all vehicles carrying explosives or flammable liquids. Such vehicles must stop not closer than
 15 feet or more than 50 feet from the nearest rail. This requirement does not apply to
 abandoned railroad tracks.
- Watch for Railroad Crossing Signs: Railroad crossing signs signal a driver to slow down, look, listen and be prepared to stop for a train. Crossing signs include the yellow round railroad crossing sign, pavement markings, the railroad crossbuck sign, red flashing light signals, and often, crossing gates.
- Railroad Crossing Stop Signs: If you approach a railroad crossing at which a stop sign is posted, you must come to a complete stop and proceed over the tracks only after looking both ways to make sure a train is not approaching. Never assume because there is only a stop sign that the track is not used, and a train is not coming.

- Safety Guidelines for Railroad Crossings:
 - Obey the Warning Signs: Due to the size of trains, the actual speed of a train can be very deceiving. Under no circumstances should you attempt to race a train to a crossing. Never drive around a crossing gate that is extended down.
 - Avoid Stopping on the Railroad Tracks: Never begin to cross railroad tracks
 unless you can clear the tracks without stopping. If your vehicle stalls on the tracks,
 all occupants should leave the vehicle immediately. Look to see that no train is
 approaching the crossing and carefully proceed to have the vehicle removed safely
 from the tracks.
 - Watch for Additional Trains: Where there is more than one track, a driver waiting for the track to clear must make sure another train is not coming on the other track once the first train has cleared. Be especially careful that a train is not proceeding in the opposite direction behind the first train where it may be difficult to see.

NOTE: All school buses are required to stop at all railroad crossings.

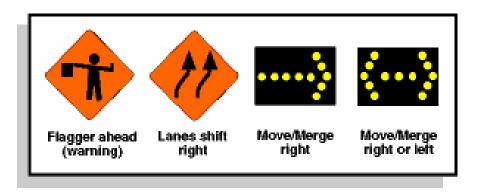


Emergency Vehicles

- Emergency vehicles such as ambulances, police vehicles, fire vehicles, and emergency rescue vehicles are permitted to display a red flashing light. Drivers must yield the right-of-way to that vehicle. Drivers must always listen for sirens on these vehicles and yield the right-of-way. The siren is usually heard before the emergency vehicle is in view. To yield the right-of-way, all traffic, in either direction, must slow down, pull to the right of the road, and stop until the emergency vehicle passes.
- When an emergency vehicle is stationary and is displaying its flashing lights, a driver
 must slow down and move into a lane, which is not adjacent to the emergency vehicle, if it is
 possible to do so safely. If it is not possible to do so safely, a driver must then reduce the
 speed of the vehicle and proceed with caution.
- Volunteer Firefighter Vehicles: Privately owned vehicles, which display a flashing blue light, are used by volunteer firefighters responding to an alarm. The driver should yield the right-of-way to these vehicles.
- <u>Emergency Medical Vehicles:</u> A flashing green light on a privately owned vehicle is used by a certified emergency medical technician responding to an emergency. A driver must yield the right-of-way to these vehicles.

Highway Construction and Maintenance Areas

These areas pose dangers both for drivers and for the workers who are trying to do their job. Be respectful of these dangers and exercise caution whenever traveling in a highway work zone.

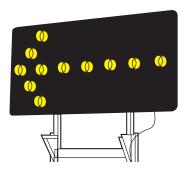


• Worksite Speed Limits: The highest legal posted speed limit in a designated highway worksite is 45 miles per hour, and may be posted lower than that. The following diagrams illustrate common work site speed limit signs:





• Flashing Arrow Boards: The illustrated flashing arrow board helps to divert traffic to a specific lane(s) when one or more lanes are under construction. Carefully move to the lane indicated by the flashing arrow board well in advance. Be careful not to move into a lane of oncoming traffic. Flashing arrow boards are often used to indicate a detour or "crossover." In these cases, lane markings on the road, traffic cones, barrels or barricades will outline the path a vehicle is supposed to follow. A flashing arrow board not indicating a direction either way is a signal to use caution but does not require a driver to move to another lane.



• Manual Traffic Control at Worksites: At some work sites, one or more flaggers may be posted at each end of the work zone to control traffic flow when one or more lanes are closed to traffic. If you are approaching a flagger, reduce your speed immediately and be prepared to follow the directions indicated in the diagram below. Drivers must stop when a flagger extends a red flag in a horizontal position into the line of traffic. Drivers may proceed at a reduced speed, only when directed by the flagger. If a flagger uses a signal paddle, the driver shall likewise stop or proceed slowly according to the "STOP" or "SLOW" message displayed on the sign. Also refer to Construction and Maintenance Worker Signs.

USE OF HAND SIGNALING DEVICES BY FLAGGER

Preferred Method: Emergency Use Only:
Paddle Flag



To Stop Traffic

Traffic Proceed

To Alert and Slow Traffic

Traffic Control Officers and Official Processions:

- Traffic Control Officers: Because of special events, traffic congestion or other reasons, a
 law enforcement officer may direct traffic at specific intersections or in other situations.
 Always obey the command of a traffic control officer. A police officer's command may be
 different from a traffic signal or sign. In such a case, the traffic officer's command is the one
 that must be obeyed.
- Official Processions: Official processions, such as a funeral procession, have the right of
 way regardless of a traffic signal that indicates otherwise.

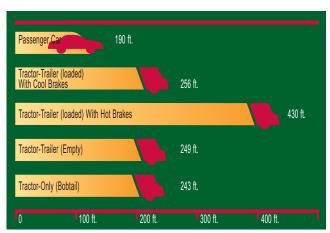


Sharing the Road with Trucks

Most drivers do not understand how to share the road safely with large trucks. To reduce the chance of an accident with a large truck, motorists must be familiar with a truck's physical capabilities with respect to braking, turning, truck driver blind spots, and maneuverability. According to the National Highway and Traffic Safety Administration (NHTSA), 1 out of 8 traffic fatalities result from a collision involving a large truck.

• Braking: Trucks take longer to stop than a car traveling at the same speed. The average passenger car traveling at 55 mph can stop in about 130-140 feet (often taking 190 feet), almost half the length of a football field. A fully loaded tractor-trailer with hot brakes may take more than 400 feet to come to a complete stop, or more than the length of a football field. Therefore it is advised that you do not make a sudden lane change and stop in front of a tractor-trailer vehicle.

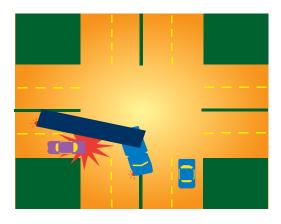
AVERAGE TOTAL STOPPING DISTANCE AT 55 MPH *



^{*}Distance based on a study of average braking distances by the Insurance Institute for Highway Safety + reaction distance recommended by the National Safety Council.

• <u>Turning:</u> With any turning vehicle, the rear wheels follow a shorter path than the front wheels. The longer the vehicle, the greater the difference.

That is why drivers of tractor-trailers often swing out to the left as the first step in making a tight turn. When following a tractor-trailer, watch its turn signals before trying to pass, especially to the right. If it appears to be moving to the left, wait a moment to check and see which way the driver is signaling and watch for a right turn.



Blind Spots: Trucks have much more severe blind spots than passenger cars. Many motorists falsely assume that a trucker can see the road better because he or she sits twice as high as the driver of a car. While truckers do enjoy a better forward view and have bigger mirrors. they still have serious blind spots into which a car can completely disappear from view, up to 20 feet in front of the cab, on either side of the tractor-trailer, particularly alongside the cab, and up to 200 feet in the rear. Motorists lingering in the blind spots on the sides and in the rear hamper a trucker's ability to take evasive action to avoid a dangerous situation. Always keep in mind that if you cannot see the truck driver in his or her side mirror, they cannot see you.



Represents danger areas around trucks where crashes are more likely to occur.

• Maneuverability: Trucks are designed to carry products long distances; they are not designed to be as maneuverable as cars. Trucks have longer stopping and accelerating distances, a wider turning radius and weigh more. On multi-lane highways, tractor-trailers stay in the center lane to help the flow of local traffic on and off the highway. Staying in the middle lane also increases the truck driver's options if he or she has to switch lanes in order to avoid a dangerous situation or an accident. The following is a list of some of the most common mistakes motorists must avoid when driving around trucks:

- Don't cut off a truck in traffic or on the highway to reach an exit or turn. Cutting into the
 open space in front of a truck removes the truck driver's cushion of safety. Trying to beat
 a truck to a single-lane construction zone creates a particularly dangerous situation. Take
 a moment to slow down and exit behind a truck. It will only take you a few extra seconds
 and will greatly reduce the risk of an accident.
- **Don't** linger alongside a truck when passing. Always pass a tractor-trailer completely and always on the left side. If you linger when passing the truck, your position makes it impossible for the trucker to take evasive action if an obstacle appears in the road ahead.
- Don't follow too closely or tailgate. When following behind a truck, if you cannot see the truck driver's rearview mirrors, there is no way the truck driver can see you. Tailgating a truck or a car is dangerous because you take away your own cushion of safety if the vehicle in front of you stops quickly. In addition, if the vehicle you are following hits something in the road, you will have no time to react before it hits the front of your car.
- Never underestimate the size and speed of an approaching tractor-trailer. Because of its large size, a tractor-trailer often appears to be traveling at a slower speed than it is. A substantial number of car-truck collisions take place at intersections because the driver of the car does not realize how close the truck is or how quickly it is approaching.

Safety tip: Never stop too close to a truck on a hill. It can roll back and strike your vehicle.

Sharing the Road with Motorcycles, Bicycles and Other Vehicles

Drivers must routinely share the roadway with two-wheeled vehicles such as motorcycles and bicycles. Motorcycles and bicycles are entitled to the same right of way and are required to observe the same traffic laws as operators of automobiles. Operators of these types of vehicles count on motorists to drive with care in their proximity.

- Watching for Two-Wheeled Vehicles: Two-wheeled vehicles are much smaller and more
 difficult to spot than most other vehicles on the road. It is extremely important that the
 automobile driver be alert and on the lookout for two-wheeled vehicles. Be sure to turn your
 head and check your blind spot.
- Maintaining a Safe Distance: The automobile driver should also maintain a safe following distance in sharing the road with two-wheeled vehicles. A motorist following a two-wheeled vehicle should increase the normal space between vehicles. Two-wheeled vehicles usually have significantly shorter stopping distances than heavier cars or buses. The safe and wise driver of four-wheeled vehicles will adjust for this and allow more room for the two-wheeled vehicle ahead.
- Two-Wheeled Vehicles at Night: Because of their poor nighttime visibility, two-wheeled vehicles present special problems to drivers of four-wheeled vehicles. In some cases bicycles will not have proper reflectors or lights and will be almost invisible at night. Drivers of all vehicles should be on the lookout for bicycles at night, especially around schools, playgrounds and parks. Motorcycle drivers and bicycle riders should do everything they can to make themselves more easily seen. Wear light colored clothing, preferably with reflective material attached, and make sure that vehicle reflectors are clean and visible.

NOTE: For more information on Motorcycle Safety, refer to the Motorcycle Operator Manual.



Bicycle Safety

Biking is fun and a great way to stay in shape. However, biking can become very dangerous on roadways, so stay safe by following these tips.

• Always Wear a Helmet

Bike helmets come in different shapes and sizes. When you shop for a helmet, be sure to look for:

- A CPSC sticker, which indicates the helmet, meets safety standards.
- Proper fit. The helmet should sit level on your head and touch it all around.
- A bright color to make you more visible to motorists.

• Follow Traffic Rules

Cyclists are required to follow the same traffic rules as automobiles when travelling on a roadway.

- Obey all stop signs, traffic signals and other laws of driving.
- Ride on the right side of the road, the same direction as traffic.
- Use hand signals to indicate turns and slowing down.

• Be Visible

It is crucial that motorists and other cyclists can see you while riding. Always make sure you are properly visible.

- Wear bright colored clothing and helmet.
- At night, use a headlight; put reflectors on your pedals, wheels; and wear reflective clothing or tape.
- Ride in the right third of the right travel lane so motorists will see you.

• Ride Defensively

Sharing the road with cars means you need to be alert and ride defensively.

- Always check for oncoming traffic before entering an intersection or merging onto a road.
- Look behind you before changing lanes.
- Remember that pedestrians have the right of way.
- Beware of motorists turning left: many may misjudge your speed and turn too soon.
- Be cautious of cars passing on the right of a vehicle turning left.

Following these safety tips may help you prevent crashes or reduce your risk of injury in case of an accident. For more information about bicycle safety, check the National Bicycle Safety Network Web site at www.cdc.gov/ncipc.

Bicycle Facts:

- In Indiana the majority of bicycle accidents occur during the five spring and summer months. May September.
- Nationwide a bicyclist is killed in a traffic accident every 10 hours.



Slow Moving Vehicles

Certain slow moving farm vehicles, construction equipment and vehicles drawn by animals may share our roadways. Use care as you approach and pass these vehicles. Be alert for the special emblem that the driver must place on the rear of the slow moving vehicle, illustrated in chapter two of this manual.

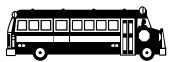
A rider of a horse or a horse-drawn vehicle has the same rights and responsibilities of a motor vehicle driver when riding on a public highway. Approach a rider with caution; do not blow your horn. Just as you would stop for the driver of a motor vehicle who signals to stop, turn or pass, you should observe a hand signal from a horseback rider or horse drawn vehicle driver.



Cell Phone Safety

According to the National Highway Traffic Safety Administration (NHTSA), cellular phone use is a growing factor in crashes. In other words, too many people are driving while also trying to concentrate on cell phone conversations. Using a cell phone while operating a vehicle affects your ability to concentrate and can be a driving hazard. Successful defensive driving depends on concentrating on the road. Follow these safety guidelines when using a cell phone while driving:

- always assess traffic conditions, and if possible, place calls when the vehicle is stopped
- position the phone within easy reach, while maintaining proper view of the road and all mirrors
- know the operations of your cell phone. Use the memory dial function, voice-activated dialing or consider obtaining a speaker phone option to free both hands while driving when possible to avoid taking your eyes off the road
- · DO NOT eat, drink, light a cigarette, read, or write while you talk and drive
- don't engage in stressful conversations and always give driving your full attention, even if it
 means ending a call
- suspend conversations during hazardous driving situations or distracting traffic situations
- allow voice mail to handle your calls and return them at your convenience
- know your own limits, and if you recognize that using a cell phone distracts you from driving safely, pull off the road when you are on the phone



School Bus Vehicle Requirements

School buses that transport students to or from school must meet the following requirements:

- be painted chrome-yellow and display the words School Bus on the front and rear of the vehicle in black letters, at least eight inches high;
- display two amber lights in front and rear, to warn motorists that the bus is slowing
 down to stop to load or unload students, and two red lights in front and rear to
 indicate that the bus is stopped to load or unload students;
- be equipped with amber turn signals;
- be equipped with a stop arm which extends at least 18 inches from the side of the bus body and with a red octagonal stop sign with white letters to be extended while the bus is stopped on the roadway for the purpose of loading or unloading students.

Unloading Passengers

A school bus driver must load and unload students as close to the right hand curb or edge of the roadway as practical.

Stopping for School Buses: Always stop whenever the red, octagonal stop sign arm
extends from the left side of the bus when approaching from either direction. After stopping
for a school bus watch for children along the side of the road.



NOTE: You need not stop if you and the school bus are going in opposite directions on a road that has more than two lanes and is separated by a median strip not made for vehicle travel.

Maximum Speed Limits

The speed limit for school buses is 40 miles per hour on county or township roads and 55 miles per hour on U.S. and State highways.

• Use for Non-School Functions

School authorities may give permission, in writing, for a school bus to be used in transporting students for certain non-school functions as prescribed by law.

• Special Purpose Buses

A special purpose bus can be registered by public school corporations and private schools for transportation of students to extracurricular events. This vehicle is not to be used as a school bus. If a van, station wagon, or bus is transporting six (6) or more persons for extracurricular events, it must have a body change to Special Purpose and must be inspected by the Indiana State Police.



Truck Requirements for Projecting Loads, Lamp and Lighting

• Projections Beyond Rear of Motor Vehicle

Motor vehicles transporting loads, which extend more than four feet beyond the rear of the motor vehicle, or that have tailboards or tailgates extending more than four feet beyond the body, must have the projections marked as follows:

- on each side of the projecting load, one red lamp/flag must be mounted, visible from the side, located to indicate maximum overhang.
- on the rear of the projecting load, two red lamps/flags, visible from the rear, one at each side; and two red reflectors visible from the rear, one at each side, must be mounted to indicate maximum width.

• Vehicular Hazard Warning Flashing Lamps

Every bus, truck and truck tractor shall be equipped with a signaling system. In addition to signaling turning movements, they shall have a switch or combination of switches that will cause the two front turn signals and the two rear signals to flash simultaneously as a vehicular traffic signal warning. The signal shall be capable of flashing simultaneously with the ignition of the vehicle on or off.

• Emergency Equipment on All Power Units

Except for a lightweight vehicle, every bus, truck, tractor-trailer, and every driven vehicle in a tow operation must be equipped as follows:

- <u>Fire extinguisher:</u> A fire extinguisher should be properly filled and located so that it is readily accessible for use. It must be securely mounted on the vehicle, and must be designed and maintained to permit visual determination of whether it is fully charged.
 - a power unit <u>that is used</u> to transport hazardous materials must be equipped with a fire extinguisher having an Underwriters' Laboratories rating of 10-B: C or more
 - a power unit <u>that is not</u> used to transport hazardous materials must be equipped with either:
 - a fire extinguisher having an Underwriters' Laboratories rating of 5-B: C or more; or
 - two fire extinguishers, each of which has an Underwriters' Laboratories rating of 4-B: C or more.
- <u>Spare fuses:</u> There must be at least one spare fuse or other overload protective device if the devices used are not of a reset type, for each kind and size used.
- Warning devices for Stopped vehicles: If you are driving a truck, bus or tractor trailer
 and your vehicle is disabled on a traveled roadway or its shoulder, you must display one
 of the following combinations of warning devices, upon stopping:
 - <u>During daylight hours</u>, use bi-directional emergency reflective triangles, or red
 flags in place of flares, reflectors, or electric lanterns. Under these conditions, no
 flare is required on the traffic side of the disabled vehicle.
 - 3 bi-directional emergency reflective triangles that conform to the requirements of Federal Motor Vehicle Safety Standard No. 125; or

- at least 6 fuses or 3 liquid-burning flares displayed as follows:
 - on the traffic side of the vehicle, in the direction of the nearest approaching traffic, place a lighted flare/fuse, lighted red electric lantern, or portable red emergency reflector.
- As quickly as possible, place the emergency devices in the following order:
 - one device approximately 100 feet from the disabled vehicle toward approaching traffic (200 feet on divided highway, and at least 500 feet if stalled within 500 feet of a curve, hillcrest, or other area where a driver's view of your vehicle may be blocked).
 - one device approximately 100 feet from the disabled vehicle in the opposite direction (200 feet on divided highways, and at least 500 feet if stalled within 500 feet of a curve, hillcrest, or other area where a driver's view of your vehicle may be blocked). Place each device in the center of the traffic lane occupied by the disabled vehicle and one at the traffic side of the vehicle.

NOTE: Liquid-burning flares, fuses, oil lanterns, or any signal produced by a flame shall not be carried on any commercial motor vehicle transporting Division 1.1, 1.2, 1.3 (explosives) hazardous materials, any cargo tank motor vehicle used for the transporting of Division 2.1 (flammable gas), or Class 3 (flammable liquid) hazardous materials whether loaded or empty; or any commercial motor vehicle using compressed gas as a motor fuel.

General Size Limitations for Commercial Vehicles without Special Permit

1 Clinic.	
Maximum Width	8 feet, 6 inches
Maximum Height of Any Vehicle	13 feet, 6 inches
Maximum Length of Any Single Vehicle	36 feet
Maximum Length	
(2-vehicle combination)	60 feet
(3-vehicle combination)	65 feet
Maximum Length of Semi-Trailer Combination	28 feet, 6 inches
Maximum Length of Any Unit of	
Tractor-Trailer Semi-Trailer Combination	28 feet, 6 inches
Maximum Distance Allowed Between	
Coupled or Towed Vehicle	15 feet

Maximum Weight Limitations

You may not move any vehicle or combination with a gross weight over 80,000 pounds on any highway without a special permit. Vehicle weight must be distributed within the following limits:

The Federal bridge formula may restrict gross weight on shorter wheel based vehicles. Overweight trucks may be impounded by law enforcement.

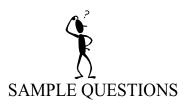
 Special Permits: Before moving loads on public highways that exceed the size and weight limits described above, you must secure a special permit from the Indiana Department of Revenue for state-maintained routes, and from local authorities for routes that are not maintained by the state. • <u>Local Limitations:</u> It is illegal to operate any vehicle that has a gross weight greater than that posted by the local road authority on any road, bridge, or structure, having jurisdiction in that area. This includes locally established "frost" laws.

Following too Close

A truck or tractor-trailer combination may not follow another tractor or tractor-trailer combination closer than 300 feet, except when overtaking to pass, or when traveling on a non-interstate roadway within a business or residence district.

Required Lighting Equipment

Every truck and bus must have two headlamps, 1 rear white license plate lamp, two red tail lamps, and at least one red stop lamp. To show vehicle width at night, every truck or bus that is 80 inches in width or wider must have four clearance lamps: 1 amber lamp at each side of the front, and 1 red lamp at each side of the rear.





LEARNER AND OPERATOR QUESTIONS:

This test consists of 16 signs and 34 questions of which the applicant can only miss two signs and six questions to pass the examination.

At least 70% of accidents leading to property damage, injuries and death, is a result of:

- A. Human Error
- B. Malfunctioning traffic signals
- C. Unsafe road conditions
- D. Defective vehicles

The safe and legal passing of another vehicle requires that a driver:

- A. Make sure the passing lane is clear of traffic and checks behind and to the left to make sure another car is not attempting to pass
- B. Apply the brake and slow down
- C. Pass when the lane marking is a solid line
- D. All answers are correct

As fog can greatly reduce visibility of other vehicles, pedestrians and traffic signals, you should:

- A. Drive cautiously and reduce speed
- B. Do not use your high headlight beams
- C. Use low headlight beams to illuminate the road and objects better
- D. All answers are correct

A good defensive driver should:

- A. Drive slowly at all times
- B. Look out for the actions of other drivers
- C. Travel at a constant speed
- D. Only drive in familiar areas

When making a right turn on red at a red light, you:

- A. Slow down and roll around the corner if no traffic is coming
- B. Do not yield the right-of-way
- C. Come to a complete stop and do not interfere with the right-of-way of any vehicles or pedestrians moving in the direction of the turn
- D. Ignore a no turn on red sign

When driving on wet roadways, you should remember:

- A. Pavement is slick immediately following a rainfall
- B. Driving on wet roads can cause hydroplaning
- C. You should give yourself additional time to stop
- D. All answers are correct

A flashing red signal means:

- A. A reason to slow down
- B. Equivalent to (same as) a stop sign, and means the driver must stop
- C. Caution, there may be danger
- D. A signal to look both ways, then proceed

You should signal your intention to turn at least:

- A. 200 feet before turning
- B. 150 feet before turning
- C. 100 feet before turning
- D. 50 feet before turning



CHAUFFEUR AND PUBLIC PASSENGER CHAUFFEUR QUESTIONS:

This test consists of 25 questions of which the applicant can only miss four to pass the examination.

What is the maximum tandem axle weight for trucks?

- A. 20,000 lbs. per axle
- B. 10,000 lbs. per axle
- C. 17,000 lbs. per axle
- D. 15,000 lbs. per axle

The driver of a commercial motor vehicle must stop within how many feet of railroad tracks?

- A. 10 40 feet
- B. 15 50 feet
- C. 20 60 feet
- D. 5-45 feet

What is the maximum height of any vehicle that may be operated without a special permit?

- A. 13 feet, 6 inches
- B. 12 feet, 7 inches
- C. 11 feet, 8 inches
- D. 10 feet, 9 inches

A public passenger chauffeur license grants the privilege to transport persons for hire so long as the vehicle is not designed or used to transport how many persons?

- A. 20 persons including the driver
- B. 15 persons including the driver
- C. 25 persons including the driver
- D. 16 persons including the driver

What is the maximum single axle weight for trucks?

- A. 17,000 lbs.
- B. 20,000 lbs.
- C. 80,000 lbs.
- D. All answers are correct



MOTORCYCLE QUESTIONS

This examination consists of 25questions of which the applicant can only miss four questions to pass the examination.

(Please refer to the Motorcycle Operators Manual for answers)

While riding an unfamiliar motorcycle:

- A. Stay in the right portion of the lane
- B. Have the owner ride with you
- C. Allow extra room for stopping
- D. Do not shift above third gear

When riding at night:

- A. Ride with flashers on
- B. Wear reflective clothing
- C. Always ride in the center lane
- D. Follow closer to the vehicle ahead for safety

When the front tire goes flat:

- A. The steering will feel heavy
- B. The back of the motorcycle will jerk from side to side
- C. The handlebars will shake violently
- D. You will lose power to the brakes

Wearing a helmet can reduce the chance of a fatal head injury in:

- A. Low speed crash only
- B. High speed crash only
- C. Any crash, regardless of the speed
- D. Single vehicle crashes only

To discourage other drivers from sharing your lane, it is usually best to:

- A. Ride in the left portion of your lane.
- B. Ride in the center portion of your lane
- C. Ride in the right portion of your lane
- D. Ride next to another vehicle